

Name	Dr. Sahil Kailas Shah					
Department	Information Technology Engg.					
Designation	Assistant Professor					
Area of Specializations	Artificial Intelligence; Machine Learning; Computer Vision; GeoAI					
Date of Joining the Institute	31/08/2026					
Email Id	sahil.shah@vpkbiet.org					
Qualifications	Ph.D. (Computer Science Engg.), M.E. (Computer Engg.), B.E. (IT Engg.)					
Vidwan Profile	https://vidwan.inflibnet.ac.in/profile/319498					
Total Experience	Teaching	16	Industry	01	Research	16

Brief Profile:

Dr. Sahil K. Shah is an academician, researcher, and technology professional with more than 16 years of experience in teaching, research, and academic development, with expertise spanning Artificial Intelligence, Machine Learning, Deep Learning, Computer Vision, Data Science, and Geospatial Artificial Intelligence. He has earned his Ph.D. in Computer Science & Engineering from Symbiosis International (Deemed University), Pune, India. He has completed his Masters in Computer Engineering and B.E. in Information Technology Engineering from Savitribai Phule Pune University (SPPU), Pune. He has also qualified GATE(CSE) examination. He has been an academic topper throughout his career. He is a Certified Microsoft Innovative Educator (MIE).

He has been associated with research activities at leading academic institutions and is a Fellow of the Indian Academy of Sciences (IASc), Bengaluru and Indian Institute of Technology (IIT), Delhi. His scholarly contributions include several Scopus and WoS indexed research publications across works in Artificial Intelligence, Machine Learning, Computer Vision, Data Mining and GeoAI applications in precision agriculture. Over the years, he has mentored more than 75 Masters dissertations and 30+ final year projects across domains such as computer vision, NLP, GeoAI and predictive analytics, transforming research ideas into production-ready models. He has taught courses at UG and PG level specifically courses such as Database Management System, Deep Learning, Big Data Analytics, Machine Learning, GeoAI, and Web Design Technologies,

He holds professional certifications from Microsoft and Oracle in Database Management Systems, Ethical Hacking, Java Programming, Azure, Artificial Intelligence, and Data Sciences, respectively. He has organized and participated in various FDPs, STTPs, ISTE workshops, Conferences, Seminars, and Symposia. He has been instrumental in the design of new courses at Savitribai Phule Pune University, Pune. He has coordinated AICTE-sponsored workshops and FDPs and is also appreciated for the best coordination and innovative teaching by IIT Bombay and Microsoft, respectively. He has received best dissertation award for his Masters dissertation at SPPU, Pune. He has received best paper award for the papers presented at international conferences at IIT, Ropar.

Prior to joining VPKBIET, he has worked as Assistant Professor in Computer Engineering (Data Science) at SIG, Symbiosis International (Deemed University), Pune. He is currently associated as Assistant Professor in

Information Technology department at VPKBIET, Baramati where he contributes to teaching, research, curriculum development, and interdisciplinary applications of emerging computational technologies.

Research Profile:

1. Google Scholar: https://scholar.google.com/citations?user=ETZAq_EAAAAJ
2. Research Gate: <https://www.researchgate.net/profile/Sahil-Shah-2>
3. SCOPUS: <https://www.scopus.com/authid/detail.uri?authorId=57202996790>
4. ORCID Profile: <https://orcid.org/0000-0001-5447-7064>
5. Vidwan ID: <https://vidwan.inflibnet.ac.in/profile/319498>

Research Publications

1. Purandare, V., Kumbhar, V., **Shah, S. K.**, Singh, T. P., Gite, S., & Pradhan, B. (2026). Machine Learning-Based Approach for Sugarcane Crop Classification Using Spectral Signature from Sentinel-2 Data in Maharashtra, India. In *Advancements in IoT Sensors and Security* (pp. 485–507). doi:10.1007/978-3-032-05507-1_21
2. Hukare, V., Kumbhar, V., & **Shah, S. K.** (2026). Sugarcane Crop Yield Prediction Using Supervised Machine Learning Techniques. *SN Computer Science*, 7(1). doi:10.1007/s42979-025-04653-3
3. Mukherjee, S., **Shah, S. K.**, Singh, T. P., & Kumbhar, V. (2025). Classification and Phenological Stage Monitoring of Grape Crop using Sentinel-1 and Sentinel-2 Time Series and Deep Learning Techniques. *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, X-5/W2-2025, 397–404. doi:10.5194/isprs-annals-x-5-w2-2025-397-2025
4. Tanwar, K., Attri, P., **Shah, S. K.**, & Singh, T. P. (2025). Landfill Suitability Mapping using Satellite Imagery and Machine Learning Techniques: A Case Study for Delhi-NCR, India. *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, X-5/W2-2025, 679–686. doi:10.5194/isprs-annals-x-5-w2-2025-679-2025
5. Jadhav, S., **Shah, S. K.**, Kumbhar, V., & Singh, T. P. (2025). Quantification of Sugarcane Crop Water Footprint Using Remote Sensing and Machine Learning Techniques: Case Study of Kolhapur District, Maharashtra, India. *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, X-5/W2-2025, 249–256. doi:10.5194/isprs-annals-x-5-w2-2025-249-2025
6. Karim, M., Tomar, S., **Shah, S. K.**, & Singh, T. P. (2025). Analyzing and predicting PM₁₀ using remote sensing and machine learning: A case study of Delhi, India. *Discover Applied Sciences*, 7(11). doi:10.1007/s42452-025-07818-0
7. Kanse, S., Lingam, V., **Shah, S. K.**, Kumbhar, V., Singh, T., & Karunendra, K. (2025). Leveraging UAV Imagery and Deep Learning for Automated Object Detection. *Journal Europeen des Systemes Automatisés*, 58(7), 1417.
8. Vohra, M., Singh, T., Illayaraja, K., & **Shah, S. K.** (2025). Generative AI-Driven Spatial Data Extraction in OpenStreetMap using Natural Language. *International Journal of Geoinformatics*, 21(6), 47–61.
9. Choudhary, P., **Shah, S. K.**, Mane, P., Kumbhar, V., & Singh, T. (2025). Multimodal Intelligence Framework for Video Content Analysis. In *2025 IEEE 6th Global Conference for Advancement in Technology (GCAT)* (pp. 1–6).
10. **Shah, S. K.**, Kumbhar, V., & Singh, T. P. (2024). Grape (*Vitis vinifera*) leaf disease detection and classification using deep learning techniques: a study on real-time grape leaf image dataset in India. *International Journal of Engineering*
11. Bhati, A., Kumbhar, V., Singh, T., & **Shah, S. K.** (2024). DQN Trader: Reinforcement Learning for Automated Trading. In *International Conference on Computational Intelligence in Pattern Recognition* (pp. 37–49).
12. Patil, N., **Shah, S. K.**, Kumbhar, V., & Singh, T. (2024). Enhancing Medical Image Quality Using Deep Learning Techniques. In *2024 First International Conference for Women in Computing (InCoWoCo)* (pp. 1–7).
13. Mangat, B., **Shah, S. K.**, Kumbhar, V., & Singh, T. (2024). Neural Network-Based Hybrid Recommendation System. In *2024 5th International Conference for Emerging Technology (INCET)* (pp. 1–8).
14. Attar, N., Shah, S., Hukare, V., Kumbhar, V., & Singh, T. (2024). Optimizing fertilizer usage using machine

- learning techniques. In *2024 MIT Art, Design and Technology School of Computing International Conference (MITADTSOCiCon)* (pp. 1–6).
15. Ghosh, R., **Shah, S. K.**, & Kumbhar, V. (2023). Deep learning-based liver tumor segmentation: A comparative study of U-Net variants for medical imaging analysis. In *2023 Global Conference on Information Technologies and Communications (GCITC)* (pp. 1–7).
 16. Singh, M., **Shah, S. K.**, Kumbhar, V., Singh, T., & Tomar, D. (2023). Enhanced Convolutional Neural Network Model for Crop Disease Identification using UAV Imagery. In *2023 IEEE Pune Section International Conference (PuneCon)* (pp. 1–7).
 17. Thakur, H., **Shah, S. K.**, & Kumbhar, V. (2023). Analysis and Forecasting of Industrial Production of Non-Durable Food Items. In *2023 International Conference on Integration of Computational Intelligent System (ICICIS)* (pp. 1–7).
 18. Shedekar, S., **Shah, S. K.**, & Kumbhar, V. (2023). Enhancing E-Commerce Insights: Sentiment Analysis Using Machine Learning and Ensemble Techniques. In *2023 International Conference on Integration of Computational Intelligent System (ICICIS)* (pp. 1–7).
 19. **Shah, S. K.**, Kumbhar, V., & Singh, T. (2023). A systematic review on crop leaf disease identification using machine learning and deep learning techniques. In *2023 7th International Conference On Computing, Communication, Control And Automation (ICCUBEA)* (pp. 1–7).
Shah, S., Kumbhar, V., & Singh, T. (2023). A systematic review on crop leaf disease identification using machine learning and deep learning techniques. In *2023 7th International Conference On Computing, Communication, Control And Automation (ICCUBEA)* (pp. 1–7).
 20. Mondal, S., **Shah, S. K.**, & Kumbhar, V. (2023). Predicting credit risk in european p2p lending: A case study of “bondora” using supervised machine learning techniques. In *2023 4th IEEE Global Conference for Advancement in Technology (GCAT)* (pp. 1–6).
 21. Hukare, V., Kumbhar, V., & **Shah, S. K.** (2023). Machine Learning Methods for Crop Yield Prediction. In *Agriculture-Centric Computation* (pp. 195–209). doi:10.1007/978-3-031-43605-5_15
 22. Sayed, A., Kumbhar, V., Jadhav, S., & **Shah, S. K.** (2023, March). Agricultural Field Boundary Delineation Using Deep Learning Techniques. *2023 International Conference on Emerging Smart Computing and Informatics (ESCI)*, 1–6. doi:10.1109/esci56872.2023.10099835
 23. Pawar, A., Singh, M., Jadhav, S., Kumbhar, V., Singh, T. P., & **Shah, S. K.** (2023). Different Crop Leaf Disease Detection Using Convolutional Neural Network. In *Proceedings of the International Conference on Applications of Machine Intelligence and Data Analytics (ICAMIDA 2022)* (pp. 966–979). doi:10.2991/978-94-6463-136-4_85
 24. Rampurkar, V., **Shah, S. K.**, Chhajed, G., & Biswash, S. (2018). An approach towards text detection from complex images using morphological techniques. In *2018 2nd International Conference on Inventive Systems and Control (ICISC)* (pp. 969–973).
 25. Takale, S. A., Kulkarni, P. J., & **Shah, S. K.** (2016). An Intelligent Web Search Using Multi-Document Summarization. *International Journal of Information Retrieval Research*, 6(2), 41–65. doi:10.4018/ijirr.2016040103
 26. **Shah, S. K.**, & Takale, S. A. (2013). Search Engine Based Intelligent Help Desk System: iAssist. In *Proceedings of the IEEE International Conference on Advanced Research in Engineering & Technology (ICARET-13)*. doi:10.13140/RG.2.1.4337.1360
 27. Rampurkar, V., Chhajed, G., & **Shah, S. K.** (2012). Review on text string detection from natural scenes. *Certified International Journal of Engineering and Innovative Technology (IJEIT)*, 2(4).

Patents:

He has 01 Indian patent to his credit.

Professional Memberships:

He has a life membership of professional bodies such as ISTE, ISRS, IAEng. and ICSES. Apart from this he is an active member of IEEE-CS, IET and CSI.

Participation in FDP/STTP

He has participated in more than 80+ FDPs, STTPs, ISTE workshops, Conferences, Seminars, and Symposia. He has successfully completed various AICTE ATAL FDPs and online courses from NPTEL, Coursera and Udemey.

As a resource person in FDP/STTP

- He has served as a resource person for workshop on "Machine Learning for Geospatial Applications" at Symbiosis Institute of Technology, Symbiosis International (Deemed University), Pune.
- Delivered more than 50+ invited talks/sessions on the topics related to database management systems, machine learning, deep learning, computer vision, web development, data structures, discrete mathematics etc.

Certifications

- He holds professional certifications from Microsoft and Oracle in Database Management Systems, Ethical Hacking, Java Programming, Azure, Artificial Intelligence, and Data Sciences, respectively.
- Microsoft certified Innovative Educator
- IBM Certified Academic Associate for Databases

FDP/STTP Organized

He has organized several FDPs, STTPs, AICTE-sponsored workshops and FDPs on the themes such as Artificial Intelligence, GeoAI, pedagogy, teaching learning and innovation, outcome-based education etc.

Awards & Recognition

- Technical Programme Committee (TPC) member for Asia Conference on Computer Vision, Image Processing and Pattern Recognition (CVIPPR 2025 & CVIPPR 2027), Second International Conference on Applied Artificial Intelligence (2AI) 2026
- Best Paper Award
- Teaching Excellence Award
- Recognition as "Certified Microsoft Innovative Educator" (MIE) from Microsoft
- Microsoft Certified Professional in Azure, Artificial Intelligence & Data Science
- Received Recognition as "National Level Ambassador for Microsoft-2022" from Microsoft India
- Empanelment as a Reviewer for many peer reviewed journals such as Ecological Informatics, Computers and Electronics in Agriculture, Information Processing in Agriculture, Smart Agricultural Technology, IEEE Transactions in Artificial Intelligence and many International conferences of repute.
- Appreciation at IEEE TENSYP 2020 for contribution in Virtual Conference Organizers Panel (VCOP) arranged by IEEE Bangladesh Section.
- All India Topper (AIR01) in NPTEL course on "Internet of Things" conducted by IIT, Kharagpur.
- Appreciation as a "Top Performing Mentor" by NPTEL, IIT Madras
- Served as Organizing Committee Member of IEEE Bombay Section Symposium (IBSS) 2017, Mumbai
- Served as Chair, Local Organizing Committee (LOC) of IEEE Bombay Section Symposium (IBSS) 2016, Baramati
- Recipient of Faculty Research Fellowship from Indian Academy of Sciences, Bengaluru and Indian Institute of Technology, Delhi

- Special Appreciation for Exceptional Performance by IIT Bombay
- Recognition as “IBM Certified Academic Associate for Databases”
- Recipient of First Prize at Savitribai Phule Pune University, Pune for M.E. Dissertation (Best PG Dissertation in Computer Engineering) supported by ACM India.
- Academic topper throughout the career

Grants Fetched

He has received grants for research projects from SPPU, Pune in the past. Moreover, he has also worked in the past with ICAR-NRCG, Pune & Pune Municipal Corporation (PMC), Pune in association with SIG, Symbiosis International (Deemed University), Pune on research projects on precision viticulture and societal applications.